

ABSTRACT

An object of the invention is to provide a method of transmitting traveling path data that is capable of transmitting a traveling path accurately with a small data amount in a probe car system. An FCD in-vehicle device in the invention resamples a travel path traveled while measuring its position with a resampling segment length that is set by associating it with a range of road curvature, represents positional information of a sampling point by a statistically biased parameter, and variable-length-encodes this parameter value in transmitting it to an FCD collection apparatus. The FCD collection apparatus decodes received data to reproduce the positional information of the sampling point, and identifies the travel path by map matching using this positional information. The data amount of traveling path can be considerably reduced by encoding. Moreover, a center can accurately keep track of the traveling path because, when a probe car travels a road with sharp bends, the interval between sampling points is set short.